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| APPLICATION NO. | FILING DATE                 | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|-----------------|-----------------------------|----------------------|---------------------|------------------|--|
| 10/619,238      | 07/14/2003                  | Alexandre Bronstein  | BRONSTEIN.002       | 5820             |  |
| PAUL H. HOR     | 7590 . 08/01/2007<br>STMANN | EXAMINER             |                     |                  |  |
| 706 TENTH ST    | TREET                       | HOEL, MATTHEW D      |                     |                  |  |
| HERMUSA BE      | EACH, CA 90254              |                      | ART UNIT            | PAPER NUMBER     |  |
|                 |                             |                      | 3714                |                  |  |
|                 |                             |                      |                     |                  |  |
| •               |                             |                      | MAIL DATE           | DELIVERY MODE    |  |
|                 |                             |                      | 08/01/2007          | PAPER            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  |  | T & 11 41  |   | A 11 (4 )  | <u> </u> |  |  |
|--|--|--|---|--|----------|--|--|
| Office Action Summary  |  | Application  | No.   | Applicant(s)   |          |  |  |
|  |  | 10/619,238   |   | BRONSTEIN, ALEXA   | NDRE     |  |  |
|  |  | Examiner   |   | Art Unit   |          |  |  |
|  |  | Matthew D. H   |   | 3714   |          |  |  |
| Period fo  | The MAILING DATE of this communication app<br>or Reply   | pears on the co  | over sheet with the c   | orrespondence addre  | ss       |  |  |
| A SH<br>WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any  | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. 9 period for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS (36(a). In no event, will apply and will expect the applications of the ap | COMMUNICATION however, may a reply be tim  kpire SIX (6) MONTHS from tion to become ABANDONEL | I. lely filed the mailing date of this commod (35 U.S.C. § 133). | ·        |  |  |
| Status   |  |  |   |  |          |  |  |
| 1)⊠  | Responsive to communication(s) filed on 30 Ap  | pril 2007.   |   |  |          |  |  |
| 2a)⊠   | This action is <b>FINAL</b> . 2b) This action is non-final.  |  |   |  |          |  |  |
| 3)   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |   |  |          |  |  |
|  | closed in accordance with the practice under E   | Ex parte Quay  | <i>le</i> , 1935 C.D. 11, 45  | 3 O.G. 213.  |          |  |  |
| Dispositi  | ion of Claims  |  |   |  |          |  |  |
| 5)□<br>6)⊠<br>7)□  | Claim(s) 21-29 and 41-51 is/are pending in the 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 21-29 and 41-51 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or  | wn from consi  |   |  |          |  |  |
| Applicati  | ion Papers   |  |   |  |          |  |  |
| 10)  | The specification is objected to by the Examine The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine   | epted or b) drawing(s) be to tion is required  | neld in abeyance. See if the drawing(s) is obj  | e 37 CFR 1.85(a).<br>ected to. See 37 CFR 1                      |          |  |  |
| Priority (   | under 35 U.S.C. § 119  |  |   |  |          |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |  |  |   |  |          |  |  |
| 2) Notice 3) Information   | te of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date  | 5)   | Interview Summary Paper No(s)/Mail Da Notice of Informal Pa                                   | nte  |          |  |  |

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# **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 41 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by von Ahn, et al. (Telling Humans and Computers Apart (Automatically) or How Lazy Cryptographers do Al, published 2002 by Carnegie Mellon University School of Computer Science).
- 2. As to Claim 41: von Ahn teaches a data store that holds a set of material for presenting a variety of stimuli that are perceptible by one or more human senses and for presenting a set of corresponding questions pertaining to the stimuli such that each question is selected to exercise a capability of a human being to perform common sense reasoning with respect to the corresponding stimuli, the data store also holding a set of correct answers for the questions (large database of images perceptible by human vision, asks questions pertaining to images, Page 4, suggestion to scramble the images to prevent programs from associating pictures with labels; Bongo captchas on Page 3 asks users questions about a property of the displayed image by asking the user to identify which group of images the image in question belongs to; in this aspect von Ahn anticipates the applicants' intended interpretation of common-sense question

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since a question is asked about a property of the displayed image as detailed in the applicants' specification, Page 8). Von Ahn teaches a service provider of a computer related service that in response to an attempt to subscribe to the computer-related service generates a communication that presents one of the stimuli and the corresponding question using the material in the data store and that obtains an answer to the question presented in the communication and that compares the answer to the corresponding correct answer from the data store (Pages 3, 4; Yahoo e-mail account Page 1; that Yahoo e-mail is a subscription service is evidenced by U.S. patent 6,493,722 B1, 1:58-2:8).

3. As to Claim 21: von Ahn teaches a method for providing a subscription to a computer-related service that is intended for use by individuals, comprising generating a communication that presents a stimulus that is perceptible by one or more human senses and poses a question that pertains to the stimulus in response to an attempt to subscribe to the computer-related service, and obtaining an answer to the question and comparing the answer to a correct answer that would be provided by a human being such that the question is selected to exercise a capability of the human being to perform common sense reasoning with respect to the stimulus (Pages 1, 3, 4).

### Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claim 42 to 44, 47 to 50, 22 to 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over von Ahn in view of Martin (U.S. patent 6,712,615 B2).
- 7. As to Claims 42 and 22: von Ahn does disclose the limitation of the service provider determining a response time to the question presented in the communication and determining whether the response time is shorter than the response time of the human being. '615, however, teaches measuring to see if a response time is too low (Fig. 7B, 12:1-14; response time measured, Fig. 7A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the response time of '615 to the captchas system of von Ahn. '615 is directed to a cognitive test battery delivered over the Internet, which is analogous to the Internet based captchas system of von Ahn because they both require the user to answer questions over the Internet. The advantage of this combination would be to enhance the security of von Ahn by cutting off the service if the response time is slower than a human's response time. One of von Ahn's intended purposes is to prevent automated bots from signing up for computer-based subscription services (Page 1). This would prevent

automated bots from entering the site because a computer responds in microseconds or milliseconds, whereas a human will respond in tenths of a second or seconds at the fastest.

- 8. As to Claim 43: von Ahn teaches material including a set of pre-selected images (Pages 3, 4).
- 9. As to Claims 44, 50, and 24: von Ahn varies the preselected images when generating the communication (randomly selected, Page 4; or varies shape, size, etc., Page 3).
- 10. As to Claim 45: von Ahn teaches material including a set of pre-selected images (randomly selected words or numbers for Eco sound-based captchas, Page 4).
- 11. As to Claim 47: These limitations are obvious for the reasons outlined above in the rejections of Claims 41 and 42.
- 12. As to Claim 48: This limitation is anticipated by von Ahn for the reasons outlined in the rejection of Claim 41.
- 13. As to Claims 49 and 23: von Ahn obtains a set of material for rendering the stimulus and the question from a data store that holds a set of pre-selected material for a variety of stimuli and questions that exercise the capability of the human being to perform common sense reasoning (selects or obtains words from a dictionary, Page 2; databases of pictures and words, Page 4).
- 14. As to Claim 25: von Ahn depicts a horse and a flower (Page 4).
- 15. As to Claim 27: von Ahn depicts the living things visually (Page 4).

As to Claim 28: von Ahn depicts the living thing using sound (Eco captchas of 16. human voice, Page 4).

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- 17. Claims 46, 51, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over von Ahn and '615 in view of Section 508 of the Rehabilitation Act (29 U.S.C. §794 (d)).
- 18. As to Claims 46, 51, and 29: While von Ahn does not specifically address adapting the stimulus to the disability of a human being, it does address that the stimulus can be addressed to the user in either a visual or aural format (Page 4). It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the method of von Ahn to adapt the stimulus of von Ahn to a disability of a human being to arrive at the inventor's claimed method because such motivation was provided by Section 508 of the Rehabilitation Act (29 U.S.C. §794 (d)) which require federal government websites to have information accessible to those with disabilities as of June 21<sup>st</sup>, 2001. This could have been done by providing a visual stimulus to accommodate those with hearing impairments or by providing an aural stimulus to accommodate those with visual impairments. A Braille stimulus could even have been provided for users with visual and hearing impairments (Braille terminal, U.S. patent 4,305,067 A). Additionally, this could have been done by simply giving the user a choice between the visual-based captchas for hearing-impaired people or the auralbased Eco captchas for hearing-impaired people (both described on Page 4). In the event the person is both seeing- and hearing-impaired, the site could use a Braille

terminal as described above. The advantage of this combination would be to comply with regulations as well as to make the access authorization method accessible to all persons, regardless of disability.

- 19. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over von Ahn and '615 in view of Denkewicz (U.S. patent 7,055,823 B2).
- 20. As to Claim 2: von Ahn and '615 disclose all of the elements of Claim 25, but lacks specificity as asking about a capability of a living thing. '823 displays a question pertaining to the capability of the living thing (Fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the stimulus depicting a living thing of '823 to the authorization method of von Ahn. Von Ahn displays images and asks questions in its authorization (Pages 1, 3, 4), in the same manner as '823 (Figs. 1 to 5; Col. 2, Lines 42 to 65). The game of '823 uses passwords to allow the player to progress from one level to the other (passwords encrypted as pictographs, Col. 4, Lines 31 to 59, common-sense reasoning on the part of the player is thus required to be authorized to move to the next level, Col. 5, Lines 9 to 11). The game of '823 can be provided over a network (Col. 5, Lines 21 to 42); von Ahn is used to authorize access to computer-related services over a network (Page 1). '823 is thus analogous art to '853. As discussed in the rejection of Claim 41, von Ahn asks a common-sense question about a property of a displayed image, as '823 does in asking about the ability of the displayed animal in Fig. 5. The advantage of this combination would be to provide the user with interesting and familiar stimuli for the user to perform

the common-sense reasoning with; this would be particularly advantageous in gaming applications such as '823 in which maintaining player interest is important for the game to be successful.

## Response to Arguments

21. Applicant's arguments with respect to Claims 1 to 20 have been considered but are most in view of the new ground(s) of rejection. The examiner's previous position on the statement of intended use as not having much patentable weight was correct (MPEP 2106, Form Para. 7.37.09 & 7.37.10). In any event, the examiner showed how it was an obvious design choice as the other uses cited in Tyree, compared to the applicants' intended use of preventing automated subscriptions to computer-based services would be equally well served as Tyree's denial-of-service attacks were caused by bots (Para. 21). Tyree did suggest a common-sense question in the form of an intelligence test (Para. 29, 36, 44-47, 52, 54, 57-59, 69-77, Fig. 2). The applicant intended for it to be interpreted as a question concerning a property of a displayed image, such as the ability of the horse in the spec., but this was not claimed. Presently cited von Ahn asks questions about the qualities of a displayed image (Pages 3 and 4) and so does '832 (Fig. 5), so the new grounds of rejection more closely reads on the applicants' intended reading of this term, but the previous rejection was adequate as limitations of the spec. are not read into the claims which are interpreted as broadly as reasonable. The applicants' reading of Tyree parsing a sentence was only one embodiment of Tyree. Denkewicz is analogous art to von Ahn for the reasons outlined

above. The examiner respectfully disagrees with the applicants as to the claims' condition for allowance.

#### Citation of Pertinent Prior Art

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The webpage <a href="www.access-board.gov/sec508/summary.htm">www.access-board.gov/sec508/summary.htm</a>, downloaded Jan. 21<sup>st</sup>, 2007 is considered to be relevant as it establishes the effective date of Section 508 of the Rehabilitation Act. <a href="www.access-board.gov/sec508/guide/act.htm">www.access-board.gov/sec508/guide/act.htm</a>, downloaded Jan. 21<sup>st</sup>, 2007 contains 29 U.S.C. § 794 (d), or Section 508 of the Rehabilitation Act. The amazon.com review of von Ahn, downloaded from <a href="www.amazon.com/Telling-computers-humans-apart-automatically/dp/B0006RWYMY">www.amazon.com/Telling-computers-humans-apart-automatically/dp/B0006RWYMY</a>, established the publication date of von Ahn in 2002.

#### Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Hoel whose telephone number is (571) 272-5961. The examiner can normally be reached on Mon. to Fri., 8:00 A.M. to 4:30 P.M.
- 25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000

Matthew D. Hoel Patent Examiner AU 3714

Supervisory Patent Examiner

Art Unit 3714